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ABSTRACT

This study examines how young women in single sex institutions perceive their educational experience in four categories: academics, resources, participation, and self-image. When investigating whether there are advantages in all female education, it is important to consider student perceptions within these all female schools. This study was conducted among 154 female students attending an urban, Catholic, all female school in the Bay Area (San Francisco, California) in grades 4 through 8, ranging from 9 through 14 years of age. The majority were Caucasian or Asian students from a relatively high socioeconomic group. The results indicate girls in the school are academically challenged, have a wide range of resources, actively participate in class, and have a positive self-image. Single sex schools do seem to have a positive effect on their female students. (EH)

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ALL FEMALE EDUCATION: SELF IMAGE AND ACADEMIC SUCCESS OF FOURTH THROUGH EIGHTH GRADE GIRLS

Running Head: All Female Education: Self Image And Academic

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By

Erin J. Heffernan

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A Thesis submitted to the faculty of the Graduate School of Education of the Dominican College of San Rafael in partial fulfillment of the requirements for the degree of Masters of Science in Education

May, 1996

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Abstract

When investigating whether there are advantages in all female education, it is important to consider student perceptions within these all female schools. This study examines how young women in single sex institutions perceive their educational experience in four categories: academics, resources, participation, and self image. The results of this study indicate that girls in these schools are academically challenged, have a wide range of resources, actively participate in class, and have a positive self image. As a result, single sex schools have a positive effect on their female students.

All Female Education: Self Image and Academic Success of Fourth Through Eighth Grade Students

Introduction

Over the past few years single sex education for young women has become an important topic of debate. The American Association of University Women (AAUW) 1992 report shows lack of equity in coeducational surroundings. Studies conducted in coeducational schools show that males demand and receive more attention than females during class discussions and are rewarded more for their academic success by teachers. Consequently, in many cases, there is a decline in young girls' self image and self esteem during adolescence that continues even as they mature into late adolescence (AAUW, 1992). An important question for parents and teachers to discuss is the role of a single sex school as opposed to a coeducational environment. Do single sex schools provide girls with an opportunity to receive the recognition in class that they currently lack? It is critical that young female students are given adequate attention so that they may advance to their fullest potential in academic areas while concurrently developing a strong sense of worth.

Statement of the Problem

How do girls attending an all girls school in grades four through eight perceive themselves in terms of self image and academic success? For the purpose of this study, the term "academic achievement" refers to class participation and a desire to challenge one's own ability in a single sex environment. "Self image" refers to students' perceptions of themselves when interacting with teachers and classmates. Furthermore, "self image" refers to students believing their teachers and classmates like them and believing their teachers and classmates think they are competent learners.

Rationale

There is no equity in women's education (Bartholomew, 1995). Title IX in the 1972 Educational Amendment prohibits discrimination in educational institutions which receive federal funds (AAUW, 1992). Women, however, throughout history have not been given the same attention as men in coeducational classrooms. In these classrooms there is an emphasis on following gender expectations which the educational system and society have placed on women. Young women are told which career paths to take in order to balance what are perceived as their future roles as wife, mother and member of the work force (Laird, 1995). This, in turn, has influenced and limited women's life choices (Bartholomew, 1995). By the year 2000, two out of three employees entering the work force will be women and minorities. Half the population is women (AAUW, 1992). Many of these women become single parents supporting a family on a single income, rarely escaping poverty (Laird, 1995). Women must be given an equal educational opportunity in order to support themselves and their families. Women's economic success is important for their family. In order for equal education to become a reality, we must address the biased attitudes played out in coeducational environments (Laird, 1995).

Background and Need

Women have not been given equal attention in coeducational classrooms. The AAUW report describes the effects of a biased education. There is a difference in the quality and quantity in education that boys and girls receive, a difference that favors boys (AAUW, 1992). In 1990, researchers from National Coalition of Advocates for Students (NCAS) interviewed administrators from twenty five rural schools in twenty one states. Thirty seven percent of the administrators interviewed did not observe compliance with Title IX in their respective districts. Girls were treated differently than

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boys in terms of equal access to education (AAUW, 1992). In many cases, teachers do not encourage girls to study mathematics or science. This is a result of a built in prejudice against girls' natural ability to grasp these concepts. This bias in education has an effect on girls' achievement scores and self esteem. It also reflects a bias in curriculum which excludes examples of professional women in text books or shows women chiefly in traditional roles of mother and housewife. The AAUW report shows that girls begin school more eager and emotionally prepared than boys. After twelve years of education, girls have fallen behind their male classmates in important subjects including math and science, and their self images have diminished. Overall, this bias affects everyone because women are key figures in families, serve as role models for girls, and are important wage earners (AAUW, 1992).

Review of the Literature

This literature review addresses girls' self esteem when they attend all girl schools. "Self esteem" is defined, for the purpose of this paper, by Bartholomew (1995) who states that girls achieve high self esteem when they are aware of and self confident with their talents, abilities, and interests. This review examines some elements that are necessary to promote girls' self esteem.

Self Esteem of Girls in Schools

Bartholomew (1995) designed a study that examined female students in education today. She found that in grades five through twelve young women avoid success if they expect social disapproval or loss of perceived femininity. Furthermore, her study presented the problem of inequity in education of females and presented a curriculum program model for girls and young women. The program was designed for classes consisting of both boys and girls in grades five through eight and young

women in grades ten through twelve. The focus of the program was helping determine female students' probability of achieving goals and focus their career choice expectations.

One hundred students in a coeducational school participated in Bartholomew's 18 week field study. Students enrolled in classes consisting of Developmental Transitions, Cultural Influences, Self Awareness and Self Esteem, Identity Issues, Career/Occupation Information, Role Models, Mentors, Communication, and Life Planning. The classes were divided according to students' grade level. In the final session, the participants completed an evaluation of the classes. They were asked if they enjoyed the classes, would they take such a class again, had they gained knowledge, had they gained self confidence and did they believe role models were important (Table 1). Questions were rated on a five point scale ranging from 1 (not at all) to 5 (very much).

Classes were well received by all of the students. Ninety three percent indicated that they would take the classes the next year if offered; 89% responded affirmatively that they learned something in the classes specifically about themselves, about the stereotyping of women and the lack of equity in schools and in society. Ninety six percent of students responded positively that the classes built up their self confidence and allowed them to focus upon career choices and life plans. Lastly, 96% felt it was important for girls to have women role models. The program, therefore, had a positive impact on both male and female students.

Table 1

Student Evaluation Results

	Attributes	*Agree*	*Disagree (in %)*
1	Enjoyment	100	0
2	Take class again	93	7
3	Knowledge gained	89	11
4	Self confidence	96	4
5	Role models (importance)	96	4

The 1992 American Association of University Women (AAUW) report is a comprehensive study of the effects of educational schooling on girls. Part of the AAUW report includes a study entitled, "The Development of Gender Roles." This report examines the transition of girls from early childhood into adulthood. Their data indicated that puberty, which begins around the age of 12, can be one of the most trying times in girls' lives. For instance, in a culture where slenderness is valued, a young girl may view her developing body as too fat. The report shows that girls who physically mature early risk developing eating disorders and often suffer from depression, a condition in adolescent girls that may not diminish as they continue to mature. The report also suggests the importance of developing coping strategies for these young women, but often adequate resources are unavailable and inadequate.

The AAUW report examines differences in self perception in young women in a variety of cultures. When elementary students were asked if they were happy with themselves, (Table 2), 68% of Hispanic girls, 65% of African American girls, and 55% of Caucasian girls answered affirmatively. In high school, (Table 3), the same question was asked again and 58% of African American girls agreed, 30% of Hispanic girls, and 22% of Caucasian girls answered affirmatively.

Table 2

Self Perception in Elementary School Students

	Culture	*Happy*	*Unhappy (in%)*
1	Hispanic	68	32
2	African American	65	35
3	Caucasian	55	45

Table 3

Self Perception in High School Students

	Culture	*Happy*	*Unhappy (in %)*
1	Hispanic	30	70
2	African American	58	42
3	Caucasian	22	78

The AAUW report used empirical studies, public opinion polls, and in-depth clinical studies to follow a control group of girls through adolescence. Results indicate there is a decline in girls' self esteem and self confidence as they move from childhood to early adolescence. Research reveals that one school transition at the end of eighth grade is more beneficial to girls rather than two changes: one from elementary school to junior high and another from junior high to high school. The study indicates that fewer transitions during adolescence are easier on girls' self esteem overall.

Brophy (1985) studied 306 kindergarten through twelfth grade students. He found that boys receive more public response opportunities and teacher criticism whether they raise their hands or not. Teachers stated that because boys were more active, they were more apt to be criticized. Teachers felt it was necessary to monitor boys more closely. Girls were observed to initiate more private contact with teachers, especially seeking approval of "housekeeping chores." The study demonstrated that teachers were inclined to give girls academic criticism during private conferences; they were encouraged to work carefully or efficiently on assignments.

When Brophy did a second study of 27 elementary school classrooms, interaction data showed the same conclusions. More visible contacts were made between teachers and male students. Interactions consisted of boys asking for attention and teachers responding to the boys' conduct. Boys called out more to answer teachers' questions and teachers initiated more private contact with boys especially on an academic and personal level. Teachers were also more likely to reward boys than girls with special privileges for behavior modifications. Both studies conducted by Brophy discussed lack of attention given to girls in coeducational schools.

Sadker and Sadker (1994) also researched coeducational classrooms and gender inequity in teaching. The classes were observed and videotaped. The researchers found that in a typical coeducational classroom of 25 students, two or three students captured 25% of the teachers' attention. Students, the majority of which were male, swung their hands up and down, got out of their chairs, and made sounds. They continued this behavior until they were called upon. This behavior was ladled by Sadker and Sadker as "green arms". Once they were called upon, they calmed down for about a minute and a half, then began the same routine with the next question. The other 70% demanded nominal attention and 20% did not demand any attention from the teacher. The research also shows that boys call out eight times more than girls. They note that even when the comments lack insight or are irrelevant, teachers responded to them. However, when girls called out without permission, the teachers often emphasized class rules of raising hands before talking and the girls were reprimanded. The authors remarked that, on the surface, it may look as if girls are doing well with better grades and fewer punishments, but the reinforcement for passivity will cause girls' sense of independence and self esteem to suffer. Sadker

and Sadker state that girls are often "victims of benign neglect" (Sadker and Sadker, 1994, 44), and are penalized for demanding attention. Such penalties may impede girls' educational and emotional growth.

When Sadker and Sadker presented these observed results to teachers, they were stunned that their teaching practices were biased favoring boys in most subjects especially in math and spelling. Past studies by Sadker and Sadker reveal that, in the elementary school environment, teacher attention is strongly related to student achievement and self esteem. In assessing attention to different groups in elementary schools, Sadker and Sadker found that white males receive the most attention followed by minority males, white females, and finally minority females, who receive the least attention from teachers.

Sadker and Sadker found that the period of adolescence is a more confusing time for girls than for boys as girls' bodies go through more profound transformations. The study states that adolescence often stifles precocious, authoritative, middle elementary grade girls and may restrain their educational development. Their interests, talents, and dreams may stagnate as they work on gaining acceptance of their female classmates. Transition from elementary to middle school may be the most potentially damaging period of a girl's young life and most of this fragile time is spent at school.

A third report by Sadker and Sadker on single sex schools confirmed again that all girls schools help develop self confidence, assertiveness, and a strong sense of identity in female students. Even as single sex schools fight to survive, the findings offer a clear message that schools without boys seem to be good for girls. Findings in Sadker and Sadker's research report show that young women are valued and supported at single sex schools and that this is crucial during the adolescence stage when low self esteem can be prominent. Single sex schools also succeed in giving

young girls excellent female role models and mentors. The faculty and staff at all girls schools are focused on helping young women reach their full potential.

Finally, Sadker and Sadker explain that girls at single sex schools can often be described as intellectually curious, serious about studies, and motivated to achieve individual potential. Their interests extend beyond traditional female roles. They are often interested in science and math. Their jobs and careers regularly exceed female stereotypes. One male teacher, who was interviewed at an all girls school, commented that the girls in his school were able to find an atmosphere promoting responsibility in academic learning and in learning to be themselves. Sadker and Sadker conclude that further reports suggest that self esteem is not only a critical sign of mental health, it is a connection to academic achievement and a direct link to career goals and hopes for the future.

Summary

Extensive studies indicate that the development of self esteem in girls is closely linked with their school experience. Several factors promote self esteem in young females including teacher attention, education on gender stereotypes, and development of goal setting skills. Coping strategies during adolescence and keeping school transitions to a minimum are also important. If coeducational schools continue to deny females these developmental opportunities, education will continue to have a negative effect on many girls, young women, and society.

Review of the Literature

This literature review addresses academic success for girls during elementary school and high school. "Academic success" is defined, for the purpose of this paper, by Bauch (1988), as academic achievement to one's potential in all subjects including mathematics, science, and reading ability.

Academic Success of Girls

A study in 1994 made by Estrich (1994) found that 60% of National Merit Scholarship finalists are boys; owning to the fact that they outscore girls on Preliminary Scholastic Assessment Tests which determine eligibility for the scholarship. Girls do not take as many advanced math and science classes as do boys. Therefore, boys outscore girls on 11 of the 14 College Board Achievement tests and on the ACT and SAT tests. Estrich believes that it is important to educate parents about raising daughters. There is a need to teach equity to girls and textbook stereotypes need to be changed. In the meantime, Estrich believes that single sex education is working for many girls.

The Estrich study finds that in single sex high schools, 80% of the girls take four years of science and math compared to two years in coeducational schools. Graduates of women's colleges do better than their female counterparts in coeducational schools in standardized test scores, the number of earned doctorates, salaries, and personal satisfaction. One third of the female board members of Fortune 1,000 companies are graduates of women's colleges. Forty three percent of math doctorates and 50% of engineering doctorates are earned by females educated in single sex liberal arts colleges. The study shows a link between single sex schools and advanced career goals of women.

Schnitt (1992) found that little has changed in the public perceptions about women. Many educators still believe women are not attracted to the natural sciences, have no gifts for higher mathematics, and are not bright enough for technology. Despite 30 years of joint schooling of boys and girls, "gender-specific" stereotypes are ingrained in the public's mind as a result of mixed classes. Studies of students in coeducational classes in the United States, England, and Germany show that boys are

called on two thirds of the time whereas girls are called upon only one third of the time. Boys received more teacher attention than did girls. In class, boys often interrupted girls and made fun of them. In the schools involved in the study, teachers described boys as intelligent, interested, and creative while girls are described as conscientious, clean, orderly, and diligent. These findings in Schnitt's study seemed to confirm that old stereotypes are still present in classrooms today.

Schnitt's study reported on Sylt Gymnasium in Westerland, Germany. Researchers separated the seventh and eighth grades in physics classes by gender. They found that episodes of boys trying to "show off" in class diminished when girls were not present. After class, the boys asked if they should help clean up rather than sitting around while the girls did the cleaning. Girls in previous coeducational classes rarely participated in physics classes. Now participation is a requirement in the single sex classes. As a comparison, these researchers held a coeducational chemistry lesson in a formerly single sex class. They found that girls did not participate but "played dumb" and preferred to be with other girls when in chemistry class. The study, therefore, reinforced the idea that separating girls and boys in science class has a positive impact.

In Bauch's (1988) report she found single sex schools, especially religious order schools, have a greater percentage of teachers with advanced degrees and job stability. Furthermore, stability in faculty staying at the same school ten years or more was demonstrated as one of the most effective factors on student achievement. Retaining a significant number of teachers who continue traditions in modern context throughout the years preserve the school's quality.

Bauch also found single sex schools differ from coeducational schools in their academic and social/psychological environments. Academically, single sex girls

schools consistently outperform coeducation schools. Single sex Catholic schools were nearly twice as effective as Catholic coeducational schools. Girls with similar socioeconomic backgrounds scored higher when in a single sex school. The Bauch study shows that African American and Hispanic students of both sexes in single sex schools score better on all tests than their counterparts in mixed-sex schools. Finally, there is a significant increase in reading and science skills for girls of single sex schools.

Morse and Handley (1985) performed a two year study on science classes in central Mississippi schools. The population was 150 seventh and eighth grade adolescents. The class diversity was about 57.7% boys and 46.3% girls. Classes were recorded on video and audio cassettes which were later studied to examine teacher-student interactions. Factors noted from these observations included the source and type of interaction, feedback, instructional or domain of question, student response time, and teacher response time. The results of the study showed that boys and girls were treated differently during classroom interactions. The predominant finding showed that males initiate and react more in class than females. The concern of this finding was in the content area where inquiry and questioning were crucial to learning new concepts. Males held the majority of the conversations and dominated the classroom discussions. Females however, outdistanced males when the teacher called on girls to answer questions which they were assigned to previously study. Being prepared for class is a female attributes which dates back to kindergarten when girls are conditioned to prepare for questions and study for tests. The study revealed that teachers expect male aggressiveness and tolerate the frequency of such behaviors. Male outbursts and unsolicited participation were perceived as indications of greater interest in science but not so with females.

The AAUW report researched the question of why girls abandon academics and boys persistently pursue challenges when both groups are equally qualified. Some researchers indicate that females develop "learned helplessness" (AAUW, 1992, 69). This refers to the lack of academic perseverance and debilitating loss of self confidence. Studies link learned helplessness with the theory of attribution. This theory describes girls attributing success to luck while boys attribute success to ability. As a result of the different attributions, boys feel mastery over academic challenges while girls feel more powerless in academic situations. Furthermore, even competent females expect failure and have lower self confidence when they encounter a new academic situation. They are more likely to abandon tasks whereas boys with the same ability will stay with the task.

The AAUW report revealed that beginning in preschool activities, classes are presented in a manner that encourages boys more than girls. Science classes, consisting of lectures and laboratory classes, were studied to see the difference in gender participation. The results showed that teachers asked males academic questions 80% more than females when they were in lecture sessions. When laboratory classes were observed, females participated more. The dilemma is that science classes consist of more lecture than laboratory classes.

An AAUW multi-state study on geometry classes resulted in changing the class design. Students now read the geometry book and do the problems first, then follow up with a classroom discussion on the topic. With this arrangement, girls outperformed boys on two of the five tests and scored equally in the other three. This type of teaching environment is called "female friendly." In traditional classes, however, topics are first introduced by a lecture, then students read, and finally do the problems. The researchers stated that therein lie the gender differences favoring boys. These studies

seem, therefore, to show that the order in which a class is conducted has an impact on the active verses passive participation of girls.

Summary

Academic success of girls and young women is influenced by many of the same factors that influence self esteem. The literature review emphasizes such factors as breaking stereotypes of subjects labeled "appropriate for girls", enrolling young women in more science and math courses, teacher attention, rewarding females for questions, and encouraging girls to participate in class. Other researched factors which promote girls' academics include encouraging girls to participate by redesigning classes that are "female friendly" and being aware of girls who have given up on participating due to "learned helplessness." Single sex schools are a more positive environment for young women. Coeducational schools must make major changes in teaching styles to promote academic success for girls, many girls will be unable to achieve their full potential success.

Methodology

Human Subjects Considerations

To ensure the protection of the rights of human subjects, this research study adheres to the ethical standards of the American Psychological Association (1994). Perspective subjects were informed of the general nature of this study, its basic purpose, rights to confidentiality, and researcher's availability to answer questions. Students remained anonymous by withholding their names on their paper and placing their questionnaire into an unmarked envelope. Opportunities to learn the results of the study were provided.

Subjects

The subjects chosen for this research assignment were 154 female students attending an urban, Catholic, all female school in the Bay Area in grades four through eight, ranging from nine through 14 years of age. The majority of the girls are of Caucasian or Asian parents who come from a relatively high socioeconomic group. Most students live near the school or commute from areas within a half hour driving distance or less. All subjects are day students.

Population

All students enrolled at this school in grades four through eight were included in the sample. There are two sections in grades four, five, and six. Each of these grades have a classroom with a homeroom teacher who teaches the majority of the subjects. Grades seven and eight have departmental classes where students circulate to different classrooms with a variety of specialist teachers, but have a homeroom teacher who serves as a mentor. Students absent from school on the day the questionnaire was distributed were not included in this study. This consisted of 12 students.

Procedure

The researcher scheduled a mutually agreeable time to conduct the study with students in grades four through eight. On the appointed day the researcher went to each class and explained the purpose of the study to the students. The researcher then distributed the questionnaire to each student in the class and explained the directions. The questionnaire was comprised of 20 short statements on academics, resources available, acceptance by peers, relationship with teachers, and participation in class. Subjects ranked the short statements and percentages were later calculated. The subjects completed the questionnaire independently and anonymously. All

subjects were given 15 minutes to complete the questionnaire. After 15 minutes students placed their questionnaire in a manila envelope.

Results

This section reports the results of analyses of information gained through a questionnaire that examined the perception of girls attending a single sex school from the following four perspectives: academic challenge, available resources, school participation, and self image. Statistical frequencies were used according to the Likert scale which ranges from 1 (strongly agree) to 5 (strongly disagree). A rating of "1" representing strongly agree and "2" agree are collapsed cells.

To determine students' perception of their academics, questions were asked regarding the students' sense of being academically challenged at their all girls school. Ninety percent reported that they agreed with the statement. When asked if academic resources were available to them when they needed it, 77% reported that they could find academic help.

School participation in class and extra curricular activities were determined by asking questions from various view points. Eighty two percent of the students felt comfortable asking questions in class when they were confused. Eighty four percent of the students reported that teachers were helpful when they did not understand the material. Eighty three percent reported that they enjoyed participating in class and 81% reported that they participated in one or more clubs and/or sports that were offered at their school.

Questions were asked to ascertain the girls self image while attending a single sex school. Seventy five percent reported that they felt recognized at school. Eighty

percent felt accepted and supported by their classmates. Finally, when asked if the students thought their teachers liked them, 71% reported that they agreed with the statement.

Table 1

Results of the Questionnaire

	Question	Agree (in %)
1	Academically challenged	90
2	Academic help offered	77
3	Ask questions when necessary	82
4	Helpful teachers	84
5	Enjoy participating in class	83
6	Participation in sports or clubs	81
7	Recognized at school	75
8	Accepted and support by peers	80
9	Teachers liked them	71

Discussion

The climate of any class sets the stage for learning. Although it is possible that learning can take place in impoverished environments, a climate that is supportive, active, resourceful, helpful, and responsive, clearly promotes learning to a greater degree than one that lacks these characteristics.

My research shows that students believe that they are academically challenged and motivated at their all girls school. The academic subjects offered are challenging and students are encouraged to their full learning potential. High academic expectations are the norm. Overall, teachers are teaching in productive manners in a unique environment, and the students are learning the material.

Academic help is readily available to students at their all girls school. Resources are accessible and students respond to these resources when they have questions or concerns. Students are educated to know where to locate these resources in an independent manner.

Students feel an academic freedom to ask questions in class when they are unclear about the concepts being discussed. Students show confidence in their learning, have few inhibitions, and question information. Teachers are helpful in encouraging these questions and expect understanding of the subject being taught.

All girls schools create a comfortable atmosphere encouraging and rewarding class participation. They are considered safe environments where the student can answer a question incorrectly and still receive positive comments for trying. Participation extends beyond the classroom setting. Girls are active at school and in extracurricular clubs and sports. They feel kinship in this setting and school spirit is enhanced.

Girls feel recognized at all girls schools and their participation is valued. Students do not advance by "becoming invisible." Small classes and high expectations commit girls to become actively involved in the school environment. Girls are generally accepted by their peers and their peers encourage and support their academic success. They are in a safe environment to act as individuals with less demands to fit into a stereotype. Girls are supported for their strengths and treated as unique personalities by faculty, staff, and peers. Finally, girls feel that they are appreciated by their teachers. They tend to have a positive attitude about their teachers which serves to foster a positive and approachable relationship.

In conclusion, this study highlights several perspectives of girls' perceptions when attending a single sex school. Further studies should investigate different types of data which might include a study of girls from a lower socioeconomic backgrounds. Another approach could examine the comparison and contrast between girls at an all girls school and girls attending a coeducational school. The question might be asked:

How does the presence of boys influence girls active and free academic participation in their classes? Would girls perception of friends support be different at a coeducational school?

This study examined only one aspect - the advantages of a single sex school environment for girls in terms of their self image and academic success. Thus, it is limited by nature and design. However, findings from this study strongly indicate that single sex schools for girls show positive advantages from both teachers' and students' viewpoints in the areas of academics, resources, participation, and self image.

References

American Psychological Association. (1994). Publication of the American Psychological Association (4thEd). Washington, DC: author

Bartholomew, C.G. (1995). Horizons: 2000: A model for gender fair education. Journal of Career Development 21 (3), 233-247.

Bauch, P. A. (1988, April). Differences among single-sex and coeducational high schools. Momentum, 56-57.

Brophy, J. (1985). Interactions of male and female students with male and female teachers. In L. C. Wilkinson, & C. B. Marrett (Eds.), Gender Influences In Classroom Interactions (pp. 115-142). Orlando: Academic Press.

Estrich, S. (1994, May). For girls' schools and women's colleges, separate is better. New York Magazine, 38.

Handley, M. H. & Morse, L. W. (1985). Listening to adolescents: gender differences in science classroom interaction. In L. C. Wilkinson, & C. B. Marrett (Eds.), Gender Influences In Classroom Interactions (pp. 37-54). Orlando: Academic Press.

Laird, S. (1995). Who cares about girls? Rethinking the meaning of teaching. Peabody Journal of Education, 70, 82-103.

Schnitt, P. (1992, September). Boys and girls apart. World Press Review, 50.

Sadker, M. and Sadker, D. (1994). Failing at Fairness. New York: Maxwell Macmillan International.

The Wellesley College Center for Research on Women. (1992). How Schools Shortchange Girls. AAUW Educational Foundation and National Educational Association.

Appendix A

Fourth Through Eighth Grade Questionnaire

Please circle the number that best fits your opinion of the question. Circle only one number per question.

1= strongly agree
2= agree
3= both agree and disagree
4= disagree
5= strongly disagree

1. I am academically challenged at my all girls school.
1 2 3 4 5

2. I am accepted by my classmates at my school.
1 2 3 4 5

3. When I need academic help, I feel like I can always find it.
1 2 3 4 5

4. My academic success is praised by teachers.
1 2 3 4 5

5. I feel unnoticed at school.
1 2 3 4 5

6. My teachers are helpful when I do not understand something.
1 2 3 4 5

7. I work hard at school.
1 2 3 4 5

8. My friends at school are supportive of me.
1 2 3 4 5

9. I have few friends at my all girls school.
1 2 3 4 5

10. I participate in one or more clubs or sports at my all girls school.
1 2 3 4 5

11. I have a hard time finding academic help.
1 2 3 4 5

12. I feel uncomfortable participating in class.
1 2 3 4 5

13. Most subjects at school are interesting to learn.
1 2 3 4 5

14. I am not academically challenged at my all girls school.
1 2 3 4 5

15. I enjoy participating in class when I know the answer.
1 2 3 4 5

16. When I am confused in class I ask questions to help me understand.
1 2 3 4 5

17. I feel that I am a good student.
1 2 3 4 5

18. My academic success is praised by friends at school.
1 2 3 4 5

19. I feel good when I participate in class.
1 2 3 4 5

20. My teachers like me.
1 2 3 4 5

About the Author

Erin Heffernan first became interested in all female schooling while attending San Domenico High School, a boarding and day school for young women. She graduated with a Bachelor of Arts degree in psychology and a minor in business management from California State University at Chico. She continued her education at Dominican College and earned a California teaching credential. Her first teaching experience, coincidentally, was working at an all girls school in San Francisco, Convent of the Sacred Heart. She worked with grades kindergarten through fourth in religious studies and collaborative work with faculty in language arts, community service and the arts. During her second year she returned to Dominican College to earn her Master's degree in education with a focus on the value of single sex education for women. She plans to continue teaching, to publish curriculum on professional women role models and to extend her research on single sex education into a doctorate program.